REMARKS

The Office Action mailed June 4, 2004 (Paper No. 5), has been carefully reviewed and by this Amendment, Applicants have canceled claims 1-3, 5, 8 and 26, amended claims 4, 6, 7, 9, 10, 13-15, 17-20 and 22-25, and added claims 27 and 28. Claims 4, 6, 7, 9-25, 27 and 28 are pending in the application; claims 22, 27 and 28 are independent. In view of the above amendments and the following remarks, favorable reconsideration in this application is respectfully requested.

On December 2, 2004, Applicants' representative was afforded the opportunity to discuss the present invention relative to the prior art with Examiner Lezak during a telephone interview. Applicants wish to express their sincere appreciation to Examiner Lezak for her willingness to spend time, having also spoken preliminarily with Applicants' representative on November 23, 2004, and for her cordiality in conducting the interview. While agreement was not reached relative to a proposed new claim distinguishing over the prior art of record, Examiner Lezak was nonetheless very courteous and Applicants' appreciate her willingness to consider their proposals on relatively short notice.

In the outstanding Office Action, the Examiner objected to claim 26 as being of improper dependent form for failing to further limit the subject matter of a previous claim. By this Amendment, claim 26 has been canceled.

The Examiner rejected claims 1 and 26 under 35 U.S.C. 102(d) as being anticipated by EP Patent 0, 609,426 B1 to Marsh. The Examiner also rejected claims 1 and 26, as well as claims 2-25, under 35 U.S.C. 103(a) as being unpatentable over Marsh and further rejected claims 1-26 under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,149,438 to Richard et al. ("Richard").

Claims 1 and 26 have been canceled. With respect to new claims 27 and 28 which are respectively submitted in replacement thereof, Applicants offer the following remarks for the Examiner's consideration.

As set forth in new claim 27, the present invention is directed to a computer-based training method carried out by a client computer used by a student. According to the method, a server dynamically downloads training content to the client computer in response to student instructions received by the client computer. The training content is part of a course, and the downloading is conducted dynamically and incrementally, when and as the student requests additional training content, such that the

entire course is not downloaded as a whole, but in portions. This reduces the memory requirements of the client computer, and also ensures that the student receives the most current course modifications which may be ongoing at the server level on those portions of the course which have not yet been downloaded. This feature, namely a server-based system dynamically downloading training content to a client computer in response to student instructions received by the client computer, is not disclosed or suggested by the prior art.

In addition, the server downloads a control program, a content data file, and a navigation frame program to the client computer. The control program controls execution of the course on the client computer using the downloaded training content, as well as further course training content received dynamically from the server in response to subsequent student requests received as the course is being conducted. The student can navigate through the course by providing inputs to a *navigation frame generated by the navigation frame program*. In response to each student input requesting additional content, the *navigation frame program notifies the control program* which, in turn, determines the location of the additional course training content on the server *according to the content data file*, and uploads a request for the

additional content to the server. In response to the requests made by the control program, the server downloads a content frame program for generating a screen frame dedicated to output of the downloaded training content on the client computer. This downloading of the control program, content data file, and navigation frame program to the client computer, and the operation thereof as set forth in claim 27, is also not shown or suggested by the prior art.

Marsh describes a process for generating a course as well as the means by which the resultant interface file operates to progress through a course. There is no mention of a client/server environment in this document, and the comment in the introduction of the present specification indicates that Marsh is not particularly suited to a client/server environment. More specifically, in Marsh the entire course needs to be downloaded to the client, giving rise to the problem of how to maintain control and how to modify course content. It is to this problem, as well as others, that the present invention is directed.

Turning to Richard, it is apparent from Fig. 4, column 5, lines 17-29, and column 6, lines 25-28 thereof that Richard also involves essentially a complete download. The course program 415 which executes on the client (workstation) "... contains in computer

executable form, the educational material taught through the course" (see column 6, lines 25-28). The interface 401 of the server-based course control module 309 receives and sends messages to the execution module 311 on the workstation. These messages are for purposes such as authorization and billing, while the actual course being executed by the course program 415 is resident on the workstation.

Thus, while describing a client/server environment, Richard still operates on the principle that the course is fully downloaded to and executed on the student computer. The server downloads the full course and thereafter the ongoing role of the server is essentially a monitoring one.

Richard also does not teach the downloading of the control program, the navigation frame program and the content data file. Instead, in Richard the course is executed by the execution module 311 incorporating the course program 415, while course control remains in the course control module 309 at the server level (see column 5, lines 34-36; column 6, lines 50-53).

As set forth in new claim 28, which is a system claim generally corresponding with method claim 27 and further incorporating the subject matter of claims 10-13, the present invention is also directed to a computer based training system

including a client computer used by a student for accessing and executing training content for a course, and a server dynamically downloading the course training content to the client computer in response to student instructions received by the client computer. The system includes a control program, a navigation frame program, and a content data file, which are downloaded to the client computer by the server as was just described in connection with claim 27. The system further includes a navigation frame generated by the navigation frame program for receiving student inputs to navigate through the course during course execution and, for each input, *for notifying the control program of the need for additional course training content according to the student inputs*. The system further includes a content frame program, downloaded by the server in response to control program requests, for generating a screen frame dedicated to output of the downloaded training content; a server-downloaded information frame program which establishes a frame in the client computer for student selection of access to requested auxiliary information resources separate from the content defined in the content data file; and a server-downloaded progress variables frame program which establishes a hidden frame in the client computer, and receives updates to course progress variables as a student progresses through a course. The information frame program, *operating independently of the content*

frame program, notifies the control program of requested resources and requests relevant URL's, with the control program directing access to the URL's of the information frame. Applicants submit that this full combination of components, and the manner in which they interact as more fully set forth in claim 28, is neither shown nor suggested by the prior art.

In sum, according to the present invention as set forth in claims 27 and 28, course training content is dynamically downloaded in response to student instructions received as the course is executed. This allows the server to maintain overall control of course execution, supplying content on demand in response to student instructions. This is of major benefit, allowing dynamic modification of the content at the server level and avoiding the need for the client computer to have large processing memory and storage capacities. This allows the client to be a relatively low-capacity device, and ensures that the course can be executed on a wide variety of student computers.

For at least the foregoing reasons, claims 27 and 28 are patentable over the prior art. Applicants also request reconsideration of claim 22 as clarified with respect to its application to a client/server environment.

Claims 4, 6, 7, 9-21 and 23-25 are also in condition for allowance as claims properly dependent on an allowable base claim

and for the subject matter contained therein. Particularly, the prior art does not teach or suggest the control program being registered as a frame program, with frame dimensions set so that it is hidden (claim 6); navigation being separate from content (claim 9); or an independent information frame program for student selection of information resources (claims 10 and 11). Favorable reconsideration is requested.

It is respectfully submitted that the present application is in condition for allowance. Should the Examiner have any questions or comments, the Examiner is cordially invited to telephone the undersigned attorney so that the present application can receive an early Notice of Allowance.

Respectfully submitted,

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